

Weekly Report

06/11/2018 – 14/11/2018

The working theme of the last week is continuing to read through on the searching keywords "crowd-based + visualization + software engineering + requirements engineering" and read as much as possible to crystallize my thoughts. Nevertheless, I tried to find the papers in TVCG but I didn't find the papers that inspire my idea, and I found most of the papers that inspired me are in the journal in software engineering. Perhaps, most software visualization papers are published in a kind of software engineering journal.

The most outstanding papers of the last week are "Crowdsourcing in Software Engineering [1]", it discusses how crowdsourcing change software development and key motivations for engaging and highlights several key challenges ahead. "The Interactive Narrator Tool: Effective Requirements Exploration and Discussion through Visualization [2]", this work proposes a tool that uses NLP to extract user stories then translated into an interactive network diagram with zooming and filtering capabilities. In this part of using NLP is may also apply for extract crowdsourcing, but I have no idea about which is appropriate in requirements engineering plus NLP. Lastly, a work presents a taxonomy and some preliminary principles for designing visual representations of formal requirements specifications in "On the Use of Visualization in Formal Requirements Specification [3]". I think the last paper may help me to understand how to design a good visualization for the requirements engineering process.

[1] LaToza, T. D., & van der Hoek, A. (2016). Crowdsourcing in software engineering: Models, motivations, and challenges. *IEEE software*, 33(1), 74-80.

[2] Slob, G. J., Dalpiaz, F., Brinkkemper, S., & Lucassen, G. (2018). The Interactive Narrator Tool: Effective Requirements Exploration and Discussion through Visualization.

[3] Dulac, N., Viguier, T., Leveson, N., & Storey, M. A. (2002). On the use of visualization in formal requirements specification. In *Requirements Engineering, 2002. Proceedings. IEEE Joint International Conference on* (pp. 71-80). IEEE.